

**Conclusion:** Improved success rate and LOS in three specialties suggests effective recommendations and increased experience, while the worsening colorectal results raise sustainability issues. Further ERAS amendments are required.

## 0738: OUTCOMES FOR SURGICAL FEMALE PATIENTS ADMITTED TO A SURGICAL ASSESSMENT UNIT WITH RIGHT ILIAC FOSSA PAIN - IS IT TIME FOR A MULTIDISCIPLINARY APPROACH?

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**Aims:** Female patients presenting with RIF pain form a large proportion of all surgical emergencies. Some 40% are treated conservatively for 'non-specific abdominal pain' (NSAP). This study investigates diagnostic and treatment outcomes of women presenting with RIF and lower abdominal pain.

**Methods:** From January 2010 - April 2011, details of women aged 16 - 60 years attending A&E and transferred to SAU with RIF or lower abdominal pain, were recorded on a prospectively collected database and analysed.

**Results:** Of 1562 female patients referred from A&E to SAU, 544 presented with abdominal pain or GI symptoms, of which 308 were admitted with RIF/lower abdominal pain (median age 25, range 16-59 years). 87 were treated operatively (80 laparoscopic; 7 open), diagnoses: 40 appendicitis; 5 other surgical; 21 gynae and 21 NAD. 153/308 (50%) were managed conservatively, diagnoses: 112 NSAP, 11 gynae, 11 urological, 5 musculo-skeletal and 14 other surgical. 63/308 (20%) were referred to O&G. 1 patient was referred to infectious diseases; 4 self-discharged.

**Conclusions:** 28% of patients were managed surgically and 46% conservatively. 31% had gynaecological pathology compared with 19% confirmed surgical pathology and 44% non-specific pathology. This suggests an MDT approach, including general surgeons and gynaecologists, would be optimal.

## 0904: EMERGENCY DEPARTMENT DIAGNOSIS OF WOMEN PRESENTING WITH LOWER ABDOMINAL PAIN: APPENDICITIS OR GYNAECOLOGICAL?

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**Aim:** To investigate the diagnosis of women of childbearing age presenting to the Emergency Department (ED) with lower abdominal pain.

**Method:** In this retrospective study, we reviewed the medical records of all non-pregnant women aged 15 - 55 presenting to Chelsea and Westminster ED with lower abdominal pain between September - November 2011. Details of referrals, investigations and treatments were carefully recorded.

**Results:** Of the forty-eight women that met the inclusion criteria, ED diagnoses included acute appendicitis (n=32), ovarian cyst (n=6), pelvic inflammatory disease (n=2), endometriosis (n=2) and other (n=6). In the group of patients diagnosed with acute appendicitis, 12 (37.5%) underwent laparoscopy and only 6 (18.8%) had a confirmed diagnosis of appendicitis. Additionally in this group, 9 (28.1%) were later found to have a gynaecological pathology confirmed by ultrasound without laparoscopy (n=6), or at laparoscopy (n=3).

**Conclusion:** Women of childbearing age presenting to the ED with lower abdominal pain may benefit from a gynaecological review before being referred to the surgeons with the diagnosis of acute appendicitis. Additionally, ultrasonography has a valuable role in confirming gynaecological pathology and in some cases avoiding the need for laparoscopy.

## 0974: DEDICATED ACCESS TO ULTRASOUND: ESSENTIAL FOR AN EMERGENCY GENERAL SURGICAL SERVICE

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**Aim:** Establish the ultrasound requirement of an emergency general surgical service. Assess the impact of a dedicated ultrasound service.

**Introduction:** Ultrasound (USS) is the most frequently performed radiological investigation of the acute abdomen, used in up to 31% of emergency general surgical admissions. It has been shown to lead to earlier operative intervention and discharge.

**Methodology:** All adult emergency general surgery admissions over 30 days were included and those undergoing inpatient USS were identified. Results were used to set up a dedicated emergency general surgical ultrasound service. The study was repeated to evaluate the impact.

**Results:** A pilot study including 375 admissions revealed 66 patients (18.1%) undergoing inpatient USS, with a mean length of stay of 8.03 days. An emergency USS service was set up with 5 daily scans available.

A 14 day follow up study including 210 admissions showed 57 (27.9%) undergoing inpatient USS. There was a significantly reduced mean LOS of 4.54 days (p<0.05) in this group.

**Conclusions:** Dedicated inpatient USS sessions has led to earlier diagnosis and treatment of emergency general surgical admissions and thus significantly reduced length of stay.

## 1033: IMPROVING EFFICIENCY AND REDUCING CANCELLATIONS. AUDIT OF BOOKING AND THEATRE UTILISATION EFFICIENCY IN A DISTRICT GENERAL HOSPITAL DAY SURGERY UNIT

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**Aims:** To improve the efficiency of day case theatres and reduce the cancellation/DNA rates.

**Methods:** Audit criterion were set from our trusts targets for a booking efficiency/theatre utilisation of 90%. An initial prospective audit was performed in July 2008 with two retrospective follow up audits in June 2010 and June 2011. Data collected from the central data collection department in the trust.

**Results:** The initial audit revealed poor overall theatre utilisation with high DNA and cancellation rates. The following changes were implemented. Increases in the number of permanent staff members from 30 - 70%. All patients contacted one week before their operation to confirm attendance/allow for re-booking if unable to attend. Day case theatre sessions increased from 3.5 to 4 hours. Improvements to the booking system to include average time per case + review of list by responsible surgeon to ensure list feasibility.

These changes have seen: 1. Increase in booking efficiency from 59.9% to 94.5%. 2. Increase in theatre efficiency from 64.59% to 96.74%. 3. Decrease in DNA/Cancellations from 21% to 5%.

**Conclusions:** Improved booking systems and a reduction in cancellations/DNA rates have successfully improved the overall efficiency of the day case theatres in our trust.

## 1051: METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) SCREENING IN DAY SURGERY PATIENTS

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**Introduction:** Healthcare associated infections, such as MRSA, are associated with considerable morbidity and mortality; costing the NHS approximately £1 billion per annum. The Department of Health (DoH) has issued *MRSA Screening* guidelines, stipulating that the bulk of surgical admissions should be screened, including most day-cases. **Aim:** Screening within the Day-Surgery-Unit of our trust was assessed against our trust's universal screening policy and DoH guidelines. Compliance, clinical and cost-effectiveness were noted.

**Method:** A retrospective analysis was carried out of all patients that underwent elective surgery in the Day-Surgery-Unit between 01/12/10 - 30/11/11 using hospital records.

**Results:** 7102 patients were treated; mean (SD) age: 52.0 (19.3), Male-Female ratio: 0.8:1. Of the 4123 (58.1%) patients screened, only 12 were MRSA positive (0.29%). After exclusions by DoH guidelines 731/1132 patients were screened (64.6%), 3 were MRSA positive (0.41%).

**Conclusion:** Compliance with Trust Policy (58.1%) and DoH guidelines (64.6%) was poor. Furthermore, prevalence of MRSA in this population group was low (0.29%), compared to the 7-8% prevalence quoted for long-stay hospital patients. Screening of day-surgery patients, priced at £4.74 per screen, appears to be neither clinically efficacious nor cost-effective. We feel a revision of local policy towards targeted screening of high-risk patients is required.

## 1053: ASSESSING THE IMPACT OF AN AGEING POPULATION ON COMPLICATION RATES AND IN-PATIENT LENGTH OF STAY

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**Aims:** The aim of this study was to examine the demographics of the population served by the Surgical Department in a Tertiary Referral Centre in the West of Ireland, and to examine whether increasing age had an influence on morbidity, mortality and length of stay (LOS).

**Methods:** Data pertaining to admissions over a six-month period was collected prospectively using an ACS-NSQIP-based proforma. Data collected included age, gender, operative intervention, LOS and complications. Multivariate statistical analysis was performed using PASW software to determine those factors associated with increased risk of complications.

**Results:** 2209 patients were admitted over the six-month period. The average age was 50.37 years (+/-23.62), with 32.2% (n=731) older than 65. 291 experienced a complication, 71.48% having surgery. Death occurred in 41 patients, of whom 19 (46%) had surgery. Only 9.3% of patients younger than 65 experienced a morbidity, compared to 25.08% of older patients. Patients that died in hospital were older than patients discharged alive ( $P < 0.001$ , ANOVA). Multivariate analysis showed factors predictive of morbidity to include Emergency admission, Surgical Intervention and Age (OR 0.041).

**Conclusion:** Increasing age is associated with increased complication rates and LOS. Those patients older than 65 represent a high-risk group and should be optimised pre-operatively if possible to reduce morbidity.

## 1056: THE IMPLEMENTATION OF THE WHO SURGICAL SAFETY CHECKLIST IN A SIERRA LEONIAN HOSPITAL - A PROSPECTIVE AUDIT

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**Aims:** Sierra Leone is among the poorest countries in the world and ranks near the bottom in every health care category. We report our experience of the introduction and application of the WHO Surgical Safety Checklist during an inguinal hernia surgical camp at a charity hospital in Sierra Leone.

**Methods:** An international volunteer run surgical camp took place in October 2011. Team briefs included: electricity and water supply status, autoclave functioning, anaesthetic and surgical supplies. All patients had a SSC included with case notes for completion. Satisfaction surveys were carried out by all volunteers to assess their experience.

**Results:** 41 operations were carried out over a 6 day period. Briefing sessions were carried out daily and SSCs were complete for each patient. One patient arrived in theatre without SSC; surgery delayed and root cause analysis was carried out. There were no reported never events. Volunteer feedback regarding execution of the SSC was excellent with praise regarding improved teamwork and dedicated time available for feedback.

**Conclusions:** When used effectively the WHO SSC provides a structured, safe approach to minimise errors in surgery. We have illustrated it can successfully be adopted and adapted in Sierra Leone to improve the standard of care for surgical patients.

## 1080: A SYSTEMATIC REVIEW AND META-ANALYSIS OF SUTURE MESH FIXATION VERSUS GLUE MESH FIXATION IN OPEN INGUINAL HERNIA REPAIR

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**Objective:** The objective of this study is to systematically analyse the randomised, controlled trials comparing suture mesh fixation (SMF) versus fibrin-glue mesh fixation (FMF) in open inguinal hernia repair (OIHR).

**Methods:** Randomised, controlled trials comparing the TMF versus FMF in LIHR were analysed systematically using RevMan®, and combined outcomes were expressed as risk ratio and standardised mean difference.

**Results:** Five randomised controlled trials encompassing 679 patients were retrieved from the electronic databases. There were 315 patients in the SMF group and 364 patients in the GMF group. There was a significant heterogeneity among trials ( $p < 0.0001$ ). In the fixed effects model, operating time, post-operative pain, chronic groin pain, postoperative complications and length of hospital stay were statistically comparable between two techniques of mesh fixation in OIHR.

**Conclusion:** FMF in LIHR does not increase the risk of hernia recurrence. It is comparable to TMF in terms of operation time, post-operative pain,

chronic groin pain, complications, and hospital stay. FMF is an additional method of mesh fixation in inguinal hernia repair however it provides no additional benefit to suture mesh fixation in open repair.

## 1082: CONSENSUS VIEWS ON IMPLEMENTATION AND MEASUREMENT OF ENHANCED RECOVERY IN ENGLAND: DELPHI STUDY

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The Enhanced Recovery Partnership Programme (ERPP) commenced a spread and adoption programme throughout England and wished to examine ways to consolidate this initiative. Exploration of anecdotal evidence on the benefits of emerging new techniques in enhanced recovery programmes (ERPs) required examination, as well as methods to sustain success. The aim of this study was to interrogate expert opinion and define areas of consensus on these issues.

Experts were chosen from teams with experience of delivering a successful ERP across different surgical specialties. The Delphi technique was employed to generate consensus opinions from the expert group. During the first two rounds, an online questionnaire was completed. The final (third) round was undertaken in a face to face meeting using interactive voting.

70 experts participated. Regarding emerging techniques, the group reached consensus that there was no longer a definitive requirement for epidural pain control as laparoscopic surgery increases in prevalence. Experts agreed that data should be recorded, audited and reviewed at regular enhanced recovery meetings. There was unanimous agreement on the formation of a national enhanced recovery network.

A national enhanced recovery society is required to set standards, facilitate research into emerging techniques and to promote education, thus consolidating the ERPP initiative.

## 1136: STUDY OF THE DELAYS IN REVIEWING PLAIN RADIOGRAPHS ON THE ACUTE SURGICAL TAKE IN A DISTRICT GENERAL HOSPITAL

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**Aim:** To assess the delays occurring in the requesting, performing and documenting of radiographs and their results for acute surgical take patients.

**Methods:** Concurrent study over 2 one week periods (October 2011 and January 2012) of all adult patients admitted on the general surgical take. Electronic audit trail of timings of radiographs was correlated with the documentation in patients' records. Mann-Whitney U test was performed to analyse significance.

**Results:** During the study 139 radiographs were performed on 94 patients: 99 requested electronically, 5 manually (no audit trail so excluded). Of these, 54 (55%) radiograph results were documented in the notes (6 with no time). The median time (hours: minutes) from request to performance of radiograph was 01:59 (Range 00:00–64:57). The median time from performance to documentation was 04:12 (range 00:02–17:30). This is not significantly different ( $p=0.2407$ ) to radiographs requested on surgical patients by the Emergency Department: 35 radiographs requested, 18 had the results documented. The median time from performance to documentation was 02:33 (range 00:02–16:11).

**Conclusions:** Documentation of radiograph findings is poor and there are delays at all stages. Education is required to ensure accurate documentation and to avoid unnecessary delays in diagnosis and treatment of patients.

## NEUROSURGERY

### 0159: COMPLETE RESECTION RATES FOR POSTERIOR FOSSA TUMOURS IN CHILDREN IN SOUTH WALES OVER THE LAST 11 YEARS

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**Introduction:** The aim of our study was to determine our complete tumour resection rates for the three most common posterior fossa tumours, pilocytic astrocytoma, medulloblastoma and ependymoma, in children for the last decade.

**Methods:** Details of all paediatric patients (<16 years old) with posterior fossa tumours from January 2000 to November 2011 were obtained from the paediatric neuro-oncology database at the University Hospital of